# Inclinometers



Inclinometer				
MEMS / capacitive	IS60, 1-dimensional	C	ANopen	
		With the IS60 inclinometer 1-dimensional inclinations in the measuring range 360° can be measured. The sensor has a standardised CANopen interface, which enables easy configuration and start-up. All the parameters are stored in the internal permanent memory.		
	RoHS	CANopea		
High protection Nevel Shock / vibration Nevel Reverse polarity protection				
Robust and reliable		User-friendly and accurat	e	
<ul><li>Protection rating IP68/IP69K</li><li>Robust plastic housing</li></ul>		<ul><li>High resolution and accuracy</li><li>Programmable vibration suppression</li></ul>		
High shock resistance		<ul> <li>High sampling rate and bands</li> </ul>		
Order code 8.1S Inclinometer IS60		Attention : This is not a standard product. Delivery on requ Min. order quantity / frame order required.	est.	
<ul> <li>Measuring direction</li> <li>1 = 1-dimensional</li> <li>Measuring relation</li> <li>Measuring relatio</li></ul>	range Interface 5 = CANopen	Supply voltage 2 = 10 30 V DC		of connection 12 connector
Connection Technology		_		
Connector, self-assembly (straight)		ctor with coupling, Bus in or with external thread, Bus out		05.B-8151-0/9 05.BS-8151-0/9
Cordset, pre-assembled		ctor with coupling, 6 m [19.69'] PVC cal or with external thread, 6 m [19.69'] PV		05.00.6021.2211.006M 05.00.6021.2411.006M
Further accessories can be found in the accessories section or in th Additional connectors can be found in the connection technology s			ction_technology	



# Inclinometer MEMS / capacitive

# IS60, 1-dimensional

**CANopen** 

Technical data

## **Mechanical characteristics**

Connection CAN	M12 connector, 5-pin
Weight	approx. 0.2 kg
Protection EN 60529	IP68 / IP69K
Working temperature range	-40°C +80°C
Materials	plastic PA12-GF30
Shock resistance	30 g, 11 ms
Vibration resistance	55 Hz (1 mm)
Dimensions	68 x 42.5 x 42.5 mm

#### Interface characteristics CANopen

Interface	CANopen according to CiA DS-301, Profile to CiA DSP-410
Data rates	10 kbit/s, 20 kbit/s, 50 kbit/s, 125 kbit/s, 250 kbit/s, 500 kbit/s, 800 kbit/s, 1 Mbit/s
Functions	TPD0 (RTR, cyclic, event-driven, synchronized), parameterization per SD0 and object register, digital filter (Butterworth Low pass, 8th order), SYNC Consumer, EMCY Producer, output and control of internal device temperature (±2.0 K accuracy), failure control with the help of Heartbeat or Nodeguarding / Lifeguarding

General electrical characteristics		
Supply voltage	10 30 V DC	
Power consumption	40 105 mA	
Reverse polarity protection (+V)	yes	
Measuring axes	1	
Measuring range	360°, no limit stop	
Resolution	≤ 0.01°	
Linearity deviation	max. ± 0.4°	
Calibration accuracy (at 25°C)	± 0.1° (Zero point and final values)	
Temperature drift (Zero point)	typ. ± 0.008°/K	
Sampling rate	100 Hz	
CE compliant acc. to	EN 61326-2-3	
RoHS compliant acc. to	EU guideline 2011/65/EU	

A full description of the technical data can be found in the relevant product manual at www.kuebler.com.

2+

0003-

0

4 CAN\_H

5 CAN\_L

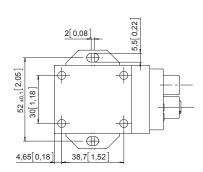
1 shield

## **Terminal assignment**

PIN	Signal	Assignment
1	CAN_SHLD	Shield
2	CAN V+	Supply voltage (+24 V DC)
3	CAN_GND	0 V
4	CAN_H	CAN_H Bus cable
5	CAN_L	CAN_L-Bus cable

## Dimensions

Dimensions in mm [inch]



2 +

4 CAN\_H

3

5 CAN\_L

1 shield

